COMMITTEE WORKSHOP

BEFORE THE

CALIFORNIA ENERGY RESOURCES CONSERVATION

AND DEVELOPMENT COMMISSION

In the Matter of:	)	
	)	
Informational Proceeding and	)	
Preparation of the 2005 Integrated	)	Docket No.
Energy Policy Report	)	04-IEP-01
	)	
Re: Electricity Demand and Retail	)	
Price Data Requirements	)	
	)	

BUNDERSON BUILDING

AUDITORIUM

901 P STREET

SACRAMENTO, CALIFORNIA

MONDAY, SEPTEMBER 20, 2004

10:45 A.M.

Reported by:
Peter Petty
Contract No. 150-04-002

COMMISSIONERS PRESENT

John Geesman, Presiding Member

ADVISORS PRESENT

Melissa Ann Jones

STAFF and CONTRACTORS PRESENT

Kevin Kennedy

Caryn Holmes

Lynn Marshall

Michael R. Jaske

ALSO PRESENT

Stephen St. Marie
California Public Utilities Commission

Lawrence Tobias
California Independent System Operator

Manuel Alvarez
Southern California Edison Company

Tim Vonder
San Diego Gas and Electric Company

Greg Bass
Alliance for Retail Energy Marketers
Sempra Energy Solutions

Michael Cockagne
Los Angeles Department of Water and Power

Frank Schultz
Southern California Edison Company
Far West Services, Ltd.

Ted Mureau
Southern California Edison Company

ALSO PRESENT

Kenneth C. Goeke
Northern California Power Agency

Mike Pretto
Silicon Valley Power
City of Santa Clara

Sarah Jaffe
Natural Resources Defense Council

Richard Aslin
Pacific Gas and Electric Company

Lowell Watros
Redding Electric Utility
City of Redding

I N D E X

I N D E X

P R O C E E D I N G S

10:45 a.m.

MR. KENNEDY: We are now ready to start. Actually, first on the agenda is Commissioner Geesman with opening remarks.

PRESIDING MEMBER GEESMAN: I'll try to truncate these. I'm John Geesman, the Commission's Presiding Member of its Integrated Energy Policy Report Committee.

The primary message I wanted to convey was the Committee's perspective as we set about this particular task, which is called for by statute. The Committee's perspective is that the CPUC and the Cal-ISO are our two primary client agencies for this work.

And in the Committee's judgment we should shape the analysis that we do, the methodology that we utilize, in such a way that it will be most useful in the CPUC's procurement process and in the Cal-ISO's grid assessment studies.

Commissioner Peevey issued an assigned Commissioners' ruling, which I believe you've all seen last Thursday to that effect. We have enjoyed a close cooperation over the past many

months with each of the three entities. And it's the Committee's intent to conduct this process with the interests of both the PUC process and the Cal-ISO process foremost in mind.

Thank you, Kevin.

MR. KENNEDY: Thank you. As I had said as we were getting set up my name is Kevin Kennedy, and I'm Staff's Program Manager for the Integrated Energy Policy Report process in this cycle.

In terms of what we're planning to do today I'm starting with a brief presentation, sort of giving an overview of the energy report proceeding this time around, particularly sort of as it fits into the context of this workshop.

Then Lynn Marshall will be providing an overview of staff's proposal for collecting data on the demand forecast.

And from there she will be walking through the proposed forms and instructions that were published along with the workshop notice.

At each of those points we will stop and give other parties a chance for comments or questions. If there's anything that you want to ask about or have concerns about, there will be an

opportunity for that.

In terms of the Integrated Energy Policy Report it is intended to serve two main large purposes in terms of overall state energy policy. The first is the development of an integrated energy policy for the state. I've included some quotes from the Public Resources Code relating to this, to the different parts of it:

"Integrated Energy Policy Report shall present policy recommendations based on an indepth and integrated analysis of the most current and pressing energy issues facing the state."

A second purpose is to help the state develop a common information base for use in energy policy decisionmakings by different entities around the state, for the purpose of insuring consistency in the underlying information that forms the foundation of energy polices and decisions affecting the state.

Those entities, what's meant there are a number of agencies that were particularly called out in the statute. And I would say that we are interpreting this a bit broader, not just those specific agencies, but all parties that are making any sort of energy policy decisions around the

state.

Those entities shall carry out their energy-related duties and responsibilities based upon the information and analyses contained in this report.

I would like to emphasize, as well, the point that Commissioner Geesman just made that part of the way that the information that's presented in the energy report becomes information that other agencies will want to use and be able to use, is if we are viewing the other agencies as, in effect, our clients for the development of that information.

So, we are looking at this requirement to some degree calling on other agencies to make use of what we're doing, but also putting a very large responsibility on the Energy Commission to develop information in a way that actually will be useful for other players as we move forward.

One aspect of that, what we're doing overall, is that we are conducting assessments and forecasts. And the point of today's workshop in a lot of ways is captured in this quote from the legislation:

"To perform these assessments and

forecasts the Commission may required submission of demand forecasts, resource plans, market assessments and related outlooks from electric and natural gas utilities, transportation fuel and technology suppliers and other market participants."

So we're here today to talk about one particular aspect of the data that staff believes is required and to talk about why we need it, what we expect to use it for and the details of how it can most usefully be provided.

One of the key aspects of the energy report process overall is the importance of statewide, both coordination, and statewide evaluation of the energy picture. The overall planning process needs to consider the entire state and region, including the investor-owned utilities, the municipal utilities, other electricity service providers, a wide variety of players in the energy system for the state and the region.

And beyond that sort of geographic integration covering all of the players the Energy Commission, in this proceeding, is looking to try to integrate the considerations of load growth,

load management, generation planning and transmission planning as we look at electricity and natural gas issues in particular.

The energy report also covers transportation fuels, transportation energy issues. The degree of integration there tends to be a bit less these days, but looking forward it is probably going to be increasing as we move forward. So we are looking for integration there, as well.

A key piece of that integration is the coordination with the PUC and the ISO. And in these overheads to some degree I'm actually pulling on the attachment that was included with Commissioner Peevey's ruling from last week, in terms of some of the bullet points. I'm sort of pulling from that.

There's been a lot of ongoing discussion amongst the staffs of the PUC, the Energy Commission and the ISO in terms of how to make the proceedings in the different agencies fit together. As you have heard from Commissioner Geesman, and is indicated in the ruling from President Peevey, there's definite support for that at the Commissioner level, as well.

The way we're looking at that at this point, with some of the details still to be worked out, is that the energy report proceeding will estimate the need for resource additions, evaluate the policies and recommend appropriate resource strategies.

In the PUC procurement process we would be looking at producing IOU-specific procurement plans, requirements for competitive generation solicitations, incorporation of needed transmission upgrades and guiding preferred resource acquisition to insure resource adequacy on a biennial cycle beginning in 2006.

In the ISO's annual grid planning process within this scheme what we would be looking at is the ISO would receive information from both the PUC procurement process and from our energy report proceeding. That they would have the ability to integrate the information into a comprehensive view for the ISO-controlled grid. And also then look at developing project-specific, -- preferred transmission projects.

So we're trying to make sure that all of these pieces fit together in a clear and consistent way as we move forward.

One of the things that is very important about what we're doing here at the Energy Commission in the energy report proceeding is that we have the requirement and the ability to look beyond simply the ISO-controlled grid or those entities under the PUC's jurisdiction.

The statewide focus is something that we feel is very important. As we were trying to look at the statewide energy picture and the statewide policy recommendations we are trying to make sure that we have the forum in this proceeding for consideration of all of the statewide and wider regional issues, as well.

Part of that is developing an integrated statewide policy, addressing the parties, not just those that are under the jurisdiction of the PUC or ISO, but sort of understanding how all of the pieces fit together for the state.

One important piece moving forward, particularly for the grid planning process, is disaggregation of the load forecast. What we're talking about primarily in terms of being able to work with the PUC's procurement proceeding is looking at forecasts that are done more at the level of the individual load-serving entities.

But staff is working with the ISO's staff to provide a good way of getting into the annual grid planning process, more disaggregated data that would be used for the transmission planning process. Making sure that what the PTOs are providing in terms of their very detailed transmission and load forecast information, you know, down virtually to the buss level, that we have a mechanism where the Energy Commission Staff can work with the information in our forecast, and that information, to make sure that the disaggregated version, as it aggregates up to the load forecast, fits in a way that is useful for the ISO. And for the PTOs in that planning process.

We're also looking somewhat broadly, in terms of the energy report proceeding, at a wide variety of environmental issues. The energy report does include an evaluation of the environmental performance of the electrical system. And we are looking for making sure that the integration, as we move forward, includes consideration of the environmental impacts as part of the overall planning and procurement process. So that is also something that we're moving

forward with.

The data collection efforts that we're looking at, starting today, in this workshop, is the first in a series of similar workshops on a variety of issues. We would expect to have a similar workshop on electricity supply, on natural gas, on transmission, on environmental impacts and on transportation fuels.

The particular workshops, depending on the nature of the data needs that staff has, and sort of how the pieces are fitting together, may look a lot like this, or maybe more on the order of scoping discussions: Here's the information we know already exists and where we're planning to go. Or maybe more focused on forms and instructions for how we are looking to try to gather new information to allow us to do the work that we need to do going forward. So it will be a mix of exact level of details and approaches as we go forward.

In terms of next steps, following this workshop and review of grid comments we expect the Committee will issue an order directing parties to submit certain data and analyses.

As part of that we would expect staff,

working with the Committee and under their direction, to prepare a revised set of forms and instructions. What we're talking about today is essentially staff's initial proposal. There may be changes to that proposal as we get direction from the Committee in terms of what is going to be included in the order.

And, of course, the order will include filing deadlines, as well.

Moving forward beyond that we would expect the load forecast to be prepared by staffs in the individual load-serving entities in early 2005. Most likely the timing for hearings on the forecast overall would be roughly the March timeframe. After the hearings the likely approach is for the Committee to direct preparation of forecasts that would be then adopted by the Energy Commission.

One of the important things, as we're looking at this proceeding and the forecasts that are developed as part of it, feeding the PUC's procurement process, it will be important that the forecasts get refreshed with new load data before the final forecasts are adopted as part of the 2005 energy report next fall.

In terms of the plan for today, as I said before, staff will provide an overview of the analyses we plan to conduct, and how the data and analyses we're requesting relate to those. There will be an opportunity for questions and comments at that point.

Actually, a couple things I left out. Before that first bullet, we do have someone here from the PUC who will be making a statement about the PUC's view of what we're doing here. And we also have someone from the ISO. I'm not sure whether he is going to actually want to make a statement or is just available as questions and comments come up. And so there will be an opportunity both for those folks.

And then to the extent that there are any questions and comments about what's been said so far before I will hand it over to Lynn for her presentation.

And then after sort of her initial presentation if there are sort of more general questions and comments, at that stage we'll take those. And then move into walking through the details of the forms and instructions.

And then after we've handled any

questions and comments on the forms and instructions, themselves, if anyone wants to make any final comments, there'll be the opportunity for that, as well.

And that's what I have at the moment. So, unless there are immediate questions and comments, what I would like to do is turn it over to Stephen St. Marie with the PUC for a statement.

DR. ST. MARIE: Good morning, and thank you, Kevin. My name is Stephen St. Marie and I am here representing the staff of the California Public Utilities Commission, as well as on behalf of President Michael Peevey. He wishes to extend his apologies for not being able to attend in person, but is very much in support of the activities being initiated here today.

Last week President Peevey issued an assigned Commissioners' ruling, an ACR, as we call it, in rulemaking 04-04-003, which is the CPUC's order instituting rulemaking to promote policy and program coordination and integration in the electricity utility resource planning, which is the proceeding where we began a close collaboration between our agency and the CEC on the adoption of long-term resource plans for

electric utilities and resource adequacy issues.

In that ruling President Peevey stated how the CPUC and CEC Staffs, with input from the CA-ISO, have been working on the integration of our planning process and coordination of our agency responsibilities and expertise to insure a consistent and coherent state process on electric resource planning.

A one-page summary sheet attached to the ACR shows our preliminary thoughts on this issue. While staff continue to discuss and fine-tune this integration of our work, I am pleased to say that we have already made a great deal of progress.

In our review of the utilities' 2004 long-term plans we are using the CEC's 2003 Integrated Energy Policy Report, IEPR, that is, results. As the CEC begins its 2005 IEPR cycle, we see further integration of the CPUC's long-term resource planning process and the CEC's IEPR process.

As stated in the September 16th assigned Commissioners' ruling, we see the CEC's 2005 IEPR as the initiation of a new integrated statewide resource planning process. And as such, as intend to build on this results in our biennial review of

utility long-term plans beginning in 2006.

We expect that issues of load forecasting and scenario analysis, as well as resource assessment for all load-serving entities, will be discussed in the CEC's 2005 IEPR process. We plan to rely on the CEC's load forecasting determinations made in the 2005 IEPR process in our review of the IOUs', that's the investor-owned utilities, 2006 long-term resource plans, except as necessary to evaluate any updates or changes that might become available after the conclusion of the IEPR process.

Thus, in the ACR of last week, President Peevey directed that all large IOUs provide their load forecasts, resource plans and other planning expertise and information to the CEC in its 2005 IEPR process. We also gave notice to the parties interested in issues related to load forecasting and resource assessment to participate in the CEC's 2005 IEPR process to address their views.

With that, I hope that the workshops today and tomorrow begin a more efficient and integrated planning process among the agencies with responsibility for insuring a reliable and reasonable cost electric supply for the consumers

in our state.

Both agencies look forward to active participation of interested parties in our proceedings. Thank you.

MR. KENNEDY: Thank you, Stephen. Larry, did you want to make an initial comment?

MR. TOBIAS: Yes.

MR. KENNEDY: As we go forward, though the microphones aren't amplifying into the room, they are important for the court reporter. So, any comments or questions, I may sort of go around the room with one of these, as necessary, to help facilitate comments.

MR. TOBIAS: Yes, I just have a short statement. My name's Lawrence Tobias, ISO Grid Planning. And I'm here today just to let everyone know that the ISO is solidly behind the process here at the CEC to develop a demand side forecast that is useful to the ISO in their transmission planning, in particular.

So therefore we support the need and the ability for the CEC to determine and project electric load out to ten years by substation. And that's where you had mentioned, Kevin, about down to the level of detail. This is what's necessary

for us in order to model the system and correctly identify transmission reinforcements.

And so therefore we stand solidly behind this process which is part of an integrated planning process involving the California ISO, CEC and CPUC. And also to the extent that this is very vital and very important to maintaining a reliable electric transmission system.

MR. KENNEDY: Thank you very much. Any comments or questions from the floor at this point?

Okay. I guess we can move on to Lynn's presentation at this point.

MS. MARSHALL: We've already talked about a couple of the important uses of the demand forecast that will be developed through this process, ISO grid planning, PUC procurement.

The other applications that will feed into the energy policy report, one important area we expect to be the analysis of impacts of demand side strategies and specifically you probably heard of the loading order adopted in the Energy Action Plan. So that data and the analysis that we collect through this process will support our analysis and progress on energy efficiency, demand

response, distributed generation and renewables.

There's generally, the data we're asking for, there's three general purposes. One is for each utility or LSE to document your forecast and the methods and data and assumptions that you used to develop that forecast. It will also be used to fill in our tracking and analysis of demand side strategies. One, I think, recent weakness of our analysis in that area is that it has tended to focus on the IOUs primarily because of a paucity of data on the nonIOU entities. So it will really help to fill in our database to get a better picture of the progress on demand side activities statewide.

And then finally, as we talked about, the need for improved disaggregation to support both resource assessment at the LSE level and the ISO grid planning process will be using the submissions by individual LSEs to improve our disaggregation and improve other aspects of our own staff forecast.

Next slide. Kevin already talked about how the process is likely to play out. After the demand forecasts are submitted staff will prepare a forecast report comparing our forecast versus

the ones that we have received. And then we expect to have a process where -- a hearing where each of the utilities can present their own view of their area forecast. Followed by adoption, both for forecasts that we need to start work on on our energy report analysis, and both the final adopted forecast in the fall.

So, in the forms, what are we trying to find out? The expected demand forecast from the LSEs' perspective. What are the price forecasts, the economic and demographic assumptions that are driving that forecast. What were the methods used. What energy efficiency or demand response programs are you assuming in that forecast. And what other what we call uncommitted demand side programs are planned that might affect, that might reduce demand further. And then what are the key uncertainties for each individual load-serving entity.

This is -- go to the next one. Okay, the focus in this process is on long-run forecasts. So while we're asking for data inclusive through 2015, and actually we've talked about modifying that to 2016 to fit in better with the procurement process, the first two or three

years of that are informational.

So we would not be -- the Commission would be adopting a forecast for 2007 forward. So that we would not have a conflict with the short-term forecast developed in the PUC processes.

The definition of those of you who have participated in these processes before, you know one of the key thresholds is what's committed and what's uncommitted. For the IOUs we're anticipating a decision approving 2006 to '08 program plans. And that would consists of committed. Generally for other entities, it's what have you approved funding for, and you have at least some program plans in place. And those are the demand side impacts that ought to be accounted for in the forecast.

And that includes demand response. And we're using the term demand response broadly here to include both traditional interruptible programs and any new price-responsive dynamic tariffs that might be developed in the future.

In terms of what's on the demand side and what's a resource, our key characteristic is what is dispatchable, as that has long been the convention. So, only nondispatchable demand

response program impacts are accounted for in the forecast.

And another aspect we didn't mention in the staff proposal, and we will include in the next version, committed should also include the new 2005 building standards. And staff's -- we're developing our own estimates of those impacts and will provide to parties what are the characteristics of the building standards that we're using in developing our forecast.

So I guess we could pause there to see if there's any general questions before we get into the specifics of the individual forms.

Kevin has the microphone.

MR. ALVAREZ: Manuel Alvarez, Southern California Edison. Lynn, it's clear to me, representing a utility, that I'm an LSE. Do you know who else -- is there a listing of who represents an LSE in the state? Is that available?

MS. MARSHALL: Yeah, we have that data. Because -- well, our primary source of data is virtually anybody who sells electricity in California reports data to us.

We're using for this process a threshold

of if you're over 200 megawatts for the last two years, this is applicable to you. So based on the data we have, we have a pretty good feel for who those entities are.

And that actually captures about 98 percent, 99 percent of load in California.

MR. ALVAREZ: Is that list available to other parties?

MS. MARSHALL: I think we can make that available, yeah.

MR. ALVAREZ: Okay, thank you.

MR. KENNEDY: Anyone else have general questions or comments?

DR. VONDER: Tim Vonder, San Diego Gas and Electric Company. Lynn, I guess I've been around for awhile and I can remember the old CFM process that we went through, you know, 1996 and prior to that, the many CFMs.

And I'm just taking a look at the slide that you put up that addressed the schedule regarding when the forecasts are to be submitted. And then the meetings for reviewing the forecasts and so forth.

And I'm trying to kind of compare that to the way we used to do things to try to see what

the changes are going to be and how the new way is going to be.

And I'm trying to determine here when the utilities, the LSEs' participation, you know, really ends. And staff's continues. In other words, what I kind of see here is that we would both present our view of what demand in our service territory would be like. And then in the past we would be ordered to make revisions to our forecast by the Committee. Staff would make their revisions and utilities would make their revisions. And then we would come back again and one or the other would be adopted.

But it doesn't look like that's the way we're going to go forward this time, from what I see here. Is it? The utilities would make their presentations, and then staff would revise their forecast, and that would basically be the end of the utilities' --

MS. MARSHALL: We don't have a firm process laid out, I think, after the point of receipt of the forecasts. So I think that's, to some extent, up to the Committee.

Do you have a recommendation?

DR. VONDER: Well, I'm just trying to

understand what's being proposed here.

MS. MARSHALL: Yeah. Kevin, do you want to comment on that?

MR. KENNEDY: Yeah. I'll let Mike Jaske take that.

DR. JASKE: Mike Jaske, CEC Staff. I think one of the things that is unclear and needs to be clear, and so in the comments that anyone wants to file following this workshop, please make a proposal if you don't want to do so today, is how to deal with uncertainty about load forecast.

As the ACR that President Peevey put out last week says, we are attempting to move into a world that addresses that uncertainty and takes that into account in the resource assessment and need determination process.

That is a difference from the old days of the electricity reports that the Energy Commission used to conduct where things were focused on a single deterministic view going forward.

And so we might, in those old days, have fought about some 2 or 3 percent difference between a utility view and a staff view. That's probably not the most important place to put one's

energies. It's more important to sort of know what details of that distribution look like, and what their likelihood is.

So, getting a sense of the shape of the range of future load forecast, I think, is one of the things we need to try to make some real progress on in this IEPR cycle. And so how best to actually do that, how to get input from you guys; compare and contrast that with the state and, you know, whoever else wants to voice an opinion about that. It is one of the things that still needs to be fleshed out and evolved.

MR. BASS: Good morning, Commissioner. Good morning, Staff. I'd like to thank you very much for providing the opportunity here for some opening comments, and also the opportunity at this workshop to go through the different forms, as my constituency does have some questions that we'd like the opportunity to address.

My comments here will be very brief. So that I don't sound like a broken record throughout the next couple of days here, the overriding issue is -- my name is Greg Bass, thank you. My name is Greg Bass and I represent the Alliance for Retail Energy Marketers; ARM is the acronym.

And my overriding concern and my group's overriding concern with this is we support absolutely the entire process, and we also support providing the information as is needed for that process.

However, one area of concern that we do have relates to the issue of confidentiality. And so if you would, please, take into account as we go through some of these different forms, how the information is going to be reported out.

I understand, reading the documentation, that there will be a process for us to be able to provide this information in a confidential manner. Our concern is that anything that is reported out at a granular level as specific, say, as an LSE, may in some way, shape or form compromise confidentiality.

And while I want the state to have the information and be able to use it for policy and planning purposes, I certainly don't want the utilities or my other competitors to have that information, too.

So, thank you very much.

MR. COCKAGNE: My name is Michael Cockagne; I'm Supervisor of Load Forecasting for

Los Angeles Department of Water and Power.

It's been a long time since 1996 and that was really the last time Los Angeles Department of Water and Power fully participated in the CFM process. A lot has changed since that time.

One thing is budgets for load forecasting have changed greatly. And this request that you're making here, and previewing the forms that I saw, there's a lot of information and detail that we're just not budgeted to provide. Our staffing level is really one person, maybe one and a half.

In the CFM process before '96 I remember we would have five to seven people participating in these type of models.

So I think that at least from a municipal utility perspective some of this information request is far more detailed than we'll be able to deliver.

So, in terms of budgeting I guess that's all I want to say. I think that LADWP could deliver a single point deterministic forecast and actually that is our process now that we accomplish. We're comfortable in that process.

We were audited by Price Waterhouse Coopers in 2001. We found that the forecast process that we use was standard practice pretty much throughout the nation.

They did comment that we were under-staffed, and that was more because of sustainability issues and people taking over the forecast. But pretty much they determined that our models were pretty up to date.

So to get into a lot of things beyond that, I think, would be unrealistic for our budget level and staffing level at LADWP at this time.

MR. SCHULTZ: Frank Schultz, Southern California Edison Company. My question is directed primarily at the different, the current definition that's being used for uncommitted versus committed energy efficiency programs.

In the long-term procurement plan that Edison just submitted before the CPUC, the definitions that we were using for committed energy efficiency consisted of PGC-funded programs, period.

So the underlying assumption is that all committed energy efficiency that was PGC-funded was considered as committed energy efficiency out

through 2014.

I'm trying to understand if this definition is different.

MS. MARSHALL: Yes. We were using the basis of what are the specific PGC-funded programs that are approved in whatever the current energy efficiency rulemaking is. And actually I thought that was comparable to the definition used by the utilities in their procurement plans.

MR. SCHULTZ: In Edison's case it is not. And I would not care to venture to speak for the other utilities.

MS. MARSHALL: Okay.

MR. SCHULTZ: So I guess it's an issue that would need to be addressed in followup comments, or how would you propose we handle that?

MS. MARSHALL: Yeah, you could certainly comment on that.

MR. SCHULTZ: Okay.

MS. MARSHALL: I think what we've proposed that is a definition that has a lot more certainty than going out to 2013. If you look at the history of energy efficiency funding it's very cyclical.

So while the remaining years might be

reasonably considered uncommitted, it seems a lot more uncertainty past the 2008 timeframe that's addressed in the efficiency --

MR. SCHULTZ: The second I'm --

MS. MARSHALL: -- rulemaking process.

DR. JASKE: Can I add to that, please.

MR. KENNEDY: Sure.

DR. JASKE: One of the things that needs to be taken into account is the degree to which the conventions that the Energy Commission wants to have for these long-term forecasts matches that which is in the emerging resource adequacy requirements.

There is a significantly tighter set of standards for what's considered committed in those proposed resource adequacy requirements in the proposed decision that's out under review right now than what you are proposing, Frank.

You have to have a program design; you have to have, you know, some basis for determining the impacts. So there would be a real challenge, you know, including impacts simply on the basis of funding out that far.

MR. SCHULTZ: I just merely wanted to point out that the process was different than what

it appears to be in this proceedings.

The second item is also fairly generic and overarching. In the long-term procurement plan the utilities were directed to file forecasts for third-party programs as part and parcel of their energy efficiency forecast. I don't see that as a requirement in this proceedings, specifically stated, anyway. It just indicates that the utilities are to forecast the energy efficiency programs that they're running. I see no allocation for a third-party program. I'm just wondering if that's different in this process or we're going to be asked to forecast third-party programs, as well.

MS. MARSHALL: I think we clearly need to have data reported on those. To the extent that you're not doing -- I know you would be reporting data that would be collected and analyzed by other people. I think that's an issue we'll have to think about on how to proceed, be --

MR. SCHULTZ: Then it is possible that third parties may be responsible for providing their own forecasts?

MS. MARSHALL: I think we're probably going to have to require that data be submitted by

the UDCs -- by the LSEs. But we'll have to be more explicit about it.

MR. SCHULTZ: I think those are the only generic questions I have regarding energy efficiency.

MS. MARSHALL: Okay.

MR. MUREAU: My name is Ted Mureau; I'm with Southern California Edison. I'd just like to get some clarification from Ms. Marshall.

You indicated in your presentation that the years 2005 through 2007 would be provided, but were considered as part of -- the main part of the evaluation of the forecast.

But in this slide here you're asking that the forecast be refreshed through load data only. And I wonder, isn't that 2004/2005?

MS. MARSHALL: Well, let me clarify. When we talk about refreshing the forecast I don't think we were envisioning another data request. But to the extent that by summer and fall we now know what the previous summer's peak was. We can rerun our models.

MR. MUREAU: So then --

MS. MARSHALL: That's the update that's envisioned. Not another round of data requests

with new forecasts from you.

MR. MUREAU: But wouldn't that primarily affect 2005, 2006, 2007?

MS. MARSHALL: Possibly.

MR. GOEKE: Ken Goeke, Northern California Power Agency. I just had a quick question for you, Lynn.

MS. MARSHALL: Yes.

MR. GOEKE: Northern California Power Agency, we're a joint power agency with a collection of utilities. Most of the pool members are under 200 megawatts. Are they the load-serving entities you're talking about?

MS. MARSHALL: Well, they're certainly load-serving entities, but we've established this 200 megawatt threshold. So some of them would be exempt. However, if you're doing a forecast for the whole area, we're certainly not going to object to, if that's how you do your forecast, to receiving --

MR. GOEKE: Well, my question is --

MS. MARSHALL: But they wouldn't be required.

MR. GOEKE: They wouldn't be required to submit any data?

MS. MARSHALL: Not in this proceeding.

MR. GOEKE: But are you considering NCPA to be a load-serving entity? Because we're not; we're a wholesaler to our members. And then --

MS. MARSHALL: No, no.

MR. GOEKE: -- those members are all under, except for individuals, I see a couple nonpool members that probably can talk for themselves, --

MS. MARSHALL: Yeah.

MR. GOEKE: -- but I'm confused. Do you want those for like the City of Biggs, City of Gridley, real small?

MS. MARSHALL: Well, some of those are under 200, right?

MR. GOEKE: We have 11 of our members are under 200, including Palo Alto the last two years, also.

MS. MARSHALL: You know, we're really trying -- we established the over 200, that's what we're asking for and that's what's required. But if you're collectively doing their forecasts, you know, it can be included. But it's not required.

MR. GOEKE: Okay. Well, we'd be here to try to support the process as much as possible,

but given, you know, we have -- we essentially do a one limited forecast, that's an aggregated forecast which would be your column 3 of 1.3.

MS. MARSHALL: Which would be what?

MR. GOEKE: Column 3 for form 1.3. Just the energy needed to serve a load by a member.

MS. MARSHALL: Okay.

MR. GOEKE: Okay.

MR. PRETTO: I'm Mike Pretto; I'm with the City of Santa Clara, also known as Silicon Valley Power.

As we reviewed the overall scope of what you're asking for we had a similar reaction to the gentleman from LADWP, which is although we are quite comfortable with our resource planning policy and our results, is that there's a large amount of a detail that you're asking for that we simply don't produce.

For example, we forecast our aggregate load, but believe it or not, we don't forecast the load by class. We have a very small residential/ commercial sector. We're mainly serve large customers. And so an aggregate forecast serves us very well.

Similar for coincident peak demands. By

class. We don't do that. And we will submit what we have, but what we have is not going to meet all of the -- fill in all of the boxes that you've got. It applies both on the price side and on the demand side.

MS. MARSHALL: Yeah. And let me say that when we designed the spreadsheet template that's posted, that's illustrative. And it's using CEC's forecast sectors. We know everybody doesn't use those sector. We know you probably, people use classes; in your case it doesn't make sense to use classes.

So, what we're asking for is you provide the classes that you use and document those. Document your drivers. And we know they won't all, in every case, match the specific fields that we put in the spreadsheet template. So it's more looking at the instructions and providing the equivalent data that's consistent with the way you do your forecast.

MS. JAFFE: Good morning, I'm Sarah Jaffe with the Natural Resources Defense Council. This is just in reference to the comments made by Silicon Valley Power and LADWP.

We're sympathetic towards people's

budget constraints and the way that they do forecasting. However, we think it's very important that we have a high level of detail for locale-specific information. And that, most of all, we do not lack detail in areas of energy efficiency, renewable programs, demand response.

So we'd like to request that all utilities make sure they give detailed information in those areas.

MR. ASLIN: My name is Richard Aslin and I represent Pacific Gas and Electric Company. And the first thing I'd like to say is that we found the 2003 Integrated Energy Policy Report very useful. And the interaction with staff was very helpful all along the way. So for that whole 18-month period of putting that together we learned a lot through the process and hopefully we can recreate that going forward.

One thing I did want to mention was that I hope we can keep the focus on the forecasts and not the methodology. Because, as some previous people mentioned, it's been a long time since ER-96. We don't support end-use forecasting modeling anymore. We don't have contracts with EPRI. So we have none of that.

So we can't really provide information which would be directly comparable to what your forecasting model uses. But we can certainly get the large categories. And that's probably the most important thing.

So I just wanted to make sure it's going to be about forecasting and not about methodology.

And other than that, just to say we look forward to the process, and the next workshops, whatever they might be.

MR. KENNEDY: Do we have any other general comments? Okay.

MR. COCKAGNE: I'm Michael Cockagne from LADWP. I'd like to respond to the comments from NRDC.

One thing about these uncertainty and efficiency forecasts with technology change, is that historically we have not done them very well. It's one reason we eliminated them in the forecast.

Primary example, electric vehicles. In 1995 there was a requirement, I believe, that 5 percent of all cars sold in California were going to be EVs by 2003.

So I think in our forecast at that time

probably 10 percent of our load was EVs; it was 3000 out of a total of 27,000. We shift back here ten years later, we find we don't even measure EV load in LADWP's service territory. It's just a waste to us. Most common form of EV now is the hybrid.

So that was a technology that we could not even see going forward. So, if you put a lot of effort into measuring technologies, I think there's a history that we have not done that very well.

Another example was demand server farms. We have 300 megawatts of load peak, you know, that was like in 1998 that we believed that L.A. was going to be a nexus of telecommunications. We were to put in 90 percent load growth server farms. We grew our peak demand by 300. And, you know, with the intercom bust that disappeared.

On the energy efficiency side, I think a lot of times there's externalities in the type of things that happen in energy efficiency that throw off our forecast. A person may put in a new, improved energy efficiency chiller, but at the same time when they remodel that building, they're going to make a lot of other changes to that

remodel, that building. Probably put in bigger types of equipment and appliances. So you really don't see the kinds of demand response energy efficiency that you might expect in the forecast.

My firm belief, with 15 years in load forecasting, is that forecasting technology change adds as much error to the forecast as it adds insights. And I think at DWP I think we're comfortable in the fixed determined type forecasts.

One thing that happens at LADWP is that we do forecasting every year. So, if there's a major change going on in our environment, we're going to catch it because there's a lot of inertia in electricity growth. So, we're comfortable with the fact that things are not going to change so fast in our forecast that we cannot pick it up, because we do our process fairly frequently, at least on a yearly basis. And we actually do a semi-annual review before the summer seasons.

I think with the frequency with which we forecast that really solves the problem of trying to forecast technology change, which we haven't done so well in the past.

If I was only going to forecast every

five years, I would say yes, do your scenario evaluations. But I believe it's not that useful to our local LSE.

MS. JAFFE: A very quick comment to that. It's part of the state's energy goals to use energy efficiency as a cost effective and reliable energy service. And the investor-owned utilities already are using energy efficiency as, you know, a real resource.

So I think in order for the state to be able to assess how that resource is being used, it is, in fact, vital that people are including that in their load forecasts.

MS. MARSHALL: Okay.

MR. KENNEDY: Don't see anyone else coming up for general comment. I think we will go ahead and march into the forms, themselves.

MS. MARSHALL: Okay.

MR. KENNEDY: Quick question. Has everyone seen the sign-up sheet at this point?

MS. MARSHALL: It's way in the back.

MR. KENNEDY: If anyone who hasn't signed in yet could raise their hand, we'll get that. And then we can get the pad back up to the front, Stephen St. Marie actually lent us his pad

to do this.

(Pause.)

MR. KENNEDY: While that's making its way back to the front, we'll go ahead and march into the forms.

MS. MARSHALL: Okay, so I'll talk about, go through form 1 briefly, and if you have specific questions about form 1, which is most of the actual demand forecast data, we can cover those.

So, starting with the first one, retail sales by sector. Whenever we're using the term sector here we mean whatever categories you use to forecast load. As long as you define them for us so we know what's included, that's what we want you to report to us. Not try and make up data to fit our forecast categories.

The first form is sales for at the LSE level. And if we have ESPs who sell in different distribution areas they need to report those separately.

So we have generally a number of forms that are for all LSEs and some that are only for the distribution companies. So then on form 1.2 you're adding, if you're a UDC you're adding to

your bundled sales, you're adding resale, direct access, whatever categories of departed load you have.

And then on form 1.3 we're simply adding losses to energy. So only the UDCs are being asked to report energy losses.

On 1.4 we're going back to the sector of more detailed level categories. And we are asking, to the extent that you have these data, and some people may not have it, peak demand, both weather-sensitive and nonweather-sensitive. And that's something we really hope to be able to improve our modeling of weather-sensitive peak load. And then we're adding losses to bundled load.

Okay, go to the next one. Form 1.5 we're moving up from LSE level to the UDC, again adding direct access and whatever varieties of departed load you have to get the distribution area coincident peak. And that's the utility's coincident peak, not coincident to the ISO. It's your own coincident peak. And adding all losses at that level.

And then form 1.6 we're asking for hourly loads, all 8760 from '03 to '015. And

we're asking for losses to reported separately, bundled and unbundled. There's a spreadsheet template in there, but really whatever data format you can submit that, that you're accustomed to submitting that in will be fine.

That is needed. It's not something we used to ask for, but increasingly all analyses are being done at the hourly level, so.

That's okay, yeah.

MR. WATROS: My name's Lowell Watros, City of Redding Electric. On the hourly loads, back in the 1990s we did run hourly load forecasts out many years, but we no longer do that.

MS. MARSHALL: Okay.

MR. WATROS: That was in support of production cost modeling.

MS. MARSHALL: Um-hum.

MR. WATROS: And so we do provide load forecasting out into that time period by month, peak and energy demand. But we do not currently do that.

MS. MARSHALL: Yeah, forecast hourly. Yeah, historic hourly loads --

MR. WATROS: We do have historical. We can provide that.

MS. MARSHALL: I would say provide what you can.

MR. WATROS: Yeah, we can provide that.

MS. MARSHALL: You're pretty close to the 200 megawatt threshold, aren't you?

MR. WATROS: Right. Yeah, just a little over --

MS. MARSHALL: So, yeah, I think generally if we're asking for something that's just completely inconsistent with the way your business does their forecasts, you can't provide it.

MR. WATROS: Okay, that's the clarification I was looking for. Thank you.

MS. MARSHALL: Yeah.

MR. MUREAU: Ted Mureau again from Southern California Edison. I have a couple of questions on the forms.

First, on the hourly data, there will be some issues on confidentiality, and I'm assuming that we'll talk about that later on in the meeting?

MS. MARSHALL: We can come back to that, yeah.

MR. MUREAU: Okay. Again, on hourly

loads, is that at ISO or at gen?

MS. MARSHALL: At generation. I think that was the convention that's been proposed in the resource adequacy, right?

MR. MUREAU: Sometimes --

MS. MARSHALL: We should clarify that, but we are trying to stick with the same protocols that are being developed. But I will clarify that --

MR. MUREAU: Because a lot of work is done at ISO as opposed to a gen --

MS. MARSHALL: Okay, we'll --

MR. MUREAU: -- settlement data is at ISO and costs are done at ISO.

MS. MARSHALL: Okay, well, we need to --

MR. MUREAU: -- at ISO.

MS. MARSHALL: -- specify that. Okay.

MR. MUREAU: I interpreted your remarks on filling out the forms that the Commission's going to be fairly accommodative as to the LSEs forecasting reporting. Is my interpretation correct?

MS. MARSHALL: Well, yeah, especially in terms of things like what drivers you use and what customer classes you're using. We don't want

made-up data. We want to see how you do your forecast.

So it is, as Rick was saying, focused on the forecast and not methodology. We are not dictating a methodology. We know most people don't do end-use forecasting anymore. So there is a lot of flexibility in that respect.

MR. MUREAU: So I can interpret that last remark as an answer to Mr. Aslin that you are not going to try and impose end-use forecasting?

MS. MARSHALL: We are not trying to impose end-use forecasting on this.

MR. MUREAU: Thank you. Then one last question. On your forms you indicate you're requesting sales data.

MS. MARSHALL: Yes.

MR. MUREAU: But on page 1 at the bottom of the page you ask for consumption data. I'm assuming that the forms are correct --

MS. MARSHALL: Yeah, the forms are correct. Because we know form 1 used to be consumption, but we decided to set aside the self-gen, distributed gen separately. So, yes.

MR. MUREAU: Okay, thank you.

MS. MARSHALL: Any other? Get past

hourly loads. So, yeah, then the next, on the next form we do have what we call private supply and that includes self gen, customer side of the meter distributed gen, wheeling. And we're asking for both annual energy use and coincident peak, not capacity, not interconnected.

So in that scenario we're particularly interested in how the UDCs are doing their forecast and what assumptions you're making about how customers use their distributed gen or what-have-you.

So, finally, and 1.8, this is weather sensitivities. On the previous peak demand we're asking, you know, the convention is average, or expected weather -- peak demand under expected weather conditions.

So what we're asking for on form 1.8 is your weather sensitivities under hotter than average weather conditions. We've asked for -- we use the nomenclature 1 and 2; that just means demand under temperature conditions with a 50 percent probability of occurring. So 5, 10 and 20 are, you know, parallel percentages.

Does anyone have any questions on that one?

MR. ALVAREZ: Manuel Alvarez, Southern California Edison. I guess I'm trying to understand what it is you want from the UDCs on the private supply. A lot of the operational data information in terms of how they use a self generation component is not available to us. That's to the generator or the customer, itself.

MS. MARSHALL: Well, we're asking --

MR. ALVAREZ: There's no --

MS. MARSHALL: -- for your forecast of distributed gen, all right. And I think to forecast the load you need to meet you've got to make some kind of forecast about how much is going to be met by private supply.

So to do that forecast you have to make some assumptions. We're not asking for data you don't have, but what data do you use. Not explicitly on this form. Here we're just asking for your forecast.

MR. ALVAREZ: Right, see, --

MS. MARSHALL: -- documentation. We do want the data that you used to make that forecast, and what assumptions did you make --

MR. ALVAREZ: Yeah, that primary source of data --

MS. MARSHALL: -- about how --
MR. ALVAREZ: -- comes from the rule 21 proceeding --
MS. MARSHALL: Yeah.
MR. ALVAREZ: -- where the --
MS. MARSHALL: Sure.
MR. ALVAREZ: -- generators, the customers, themselves, are submitting information to us.
MS. MARSHALL: Yeah.
MR. ALVAREZ: But there is no operational --
MS. MARSHALL: Right, and --
MR. ALVAREZ: -- data in that form.
MS. MARSHALL: -- and so what -- so you have to make some assumptions. So what we want to know in the documentation is what did you assume. How did you develop the assumptions that you used to make your forecast.
MR. ALVAREZ: Right. And I guess what I'm telling you is we currently don't make that forecast.
MS. MARSHALL: You don't do --
MR. ALVAREZ: That forecast isn't made. We know what the load is on the customer

currently, but --

MS. MARSHALL: Yeah.

MR. ALVAREZ: -- in terms of where the self generator goes in, how that operation characteristic --

MS. MARSHALL: Yeah.

MR. ALVAREZ: -- is profiled is a customer decision. And that information doesn't transfer from the customer to the UDCs.

MS. MARSHALL: So you don't do a forecast of --

MR. ALVAREZ: Of penetration of self generation, in other words, of DG growth. So, anyway, --

MS. MARSHALL: Okay.

MR. ALVAREZ: -- it's something we'll look at.

MS. MARSHALL: Okay, so we'll go down --

MR. KENNEDY: Just one more --

MS. MARSHALL: Okay.

MR. ASLIN: It's Richard Aslin again from Pacific Gas and Electric Company. And I did have a question on private supply, not with respect to the forecast, because that's just a generalized guess about some future period.

But was there some expectation that we would be providing historical data on private supply? Because that's where we would have a major gap.

MS. MARSHALL: Right. To the extent that you have data that you're using for the forecast, that can be included as part. But if you don't have the data and you didn't use it in your forecast, then obviously you can't provide that.

MR. ASLIN: Okay. All right.

MS. MARSHALL: We know there's not, you know, going back historically there is not good data on private supply. So we're all in the same boat there.

MR. BASS: Good afternoon; Greg Bass with ARM. My first question has to do with the 200 megawatts. I didn't do any homework into this, but could you provide some insight as to how the CEC came to 200 megawatts being kind of the break point for reporting or not reporting? And was there any consideration given, say, to -- or is that even -- will there be an opportunity to comment on that 200 megawatt limit?

MS. MARSHALL: I think you can certainly

comment on it. In our existing regulations the 200 -- it explicitly says that entities below 200 megawatts may request that they submit reduced set of forms, or submit a smaller data request.

So, rather than requesting this data from everyone and then having to get all the opt-out requests from the below 200, we simply said, okay, for this proceeding we're just going to automatically exempt everyone below 200.

So, it was based on something in our existing regulations.

MR. BASS: Okay. My next series of questions have to do with forms 1.1 through 1.8.

MS. MARSHALL: Okay.

MR. BASS: On form 1.1, currently we're reporting out in form CEC-1306 by NAICS code.

MS. MARSHALL: Um-hum.

MR. BASS: And I was wondering, would there be consideration made to revising this form so that it is in line with the, I used to call them SIC codes, with the SIC codes? Or is there already, for example, a relationship between the NAIC code and street lighting and water pumping and those sorts of things?

MS. MARSHALL: We have a map. We still

only have consumption data and SIC codes, and we have a translation available. So I think that's -- you can report it either way. But as I said, we're asking for the LSEs to report their forecast groups. Whichever way you're defining it, just please document that so we know what we're looking at.

MR. BASS: Okay.

MS. MARSHALL: Whether it's SIC-based or NAICS-based.

MR. BASS: Okay.

MS. MARSHALL: I think in the appendix we have a table with SIC and NAICS groups.

MR. BASS: Okay. So, for example, down the road if we reported form 1.1 using SIC codes, then that would meet your needs?

MS. MARSHALL: Sure, yes.

MR. BASS: Okay, good. That's what I thought I heard.

MS. MARSHALL: Yeah.

MR. BASS: Okay. On form 1.4, the coincident peak, will you be providing that?

MS. MARSHALL: Well, as I said, that's the LSE's coincident peak in terms of coincident among all your customer classes. It's not --

we're not asking you to tell us what your coincident peak is at the time of the ISO or the statewide. We get hourly loads and we can do that analyses ourselves.

MR. BASS: Okay, thanks.

MS. MARSHALL: Okay.

MR. BASS: On form 1.6, which was the hourly loads, there is reference to forecasted period. I don't see that here. I don't see the relationship between my question and this form. What --

MS. MARSHALL: I think it's --

MR. BASS: What date range were you expecting of us?

MS. MARSHALL: I think, yeah, it doesn't say explicitly in the text, does it. And I think what we were proposing is '03 to 2015, so that we have historical basis.

MR. BASS: Okay. Thank you very much.

MS. MARSHALL: All right. Anything else on form 1? Okay.

So, form 2, this is just documentation of the assumptions and the drivers that you use for your forecast. So again we've put certain fields in the forms. You may not use all of them;

you may use some that aren't there. That's what we want reported to us.

So we divided this up into forms 2.1 and 2.2 are the more detailed for the utility distribution companies. And we use the convention of having state or national drivers on the first form, and your service area drivers on the second form, 2.2.

The next two forms are for all load-serving entities, 2.3 and 2.4. 2.3 is the electricity price forecast you've used for your forecast. And natural gas, if it's used. I don't know -- not doing end-use forecasting, you may not use that.

And then 2.4 is likely what is customer counts and any other drivers. So ESPs that didn't have to report 2.1 or 2.2, any other drivers you're using for economic indicators would be reported on 2.4.

All of the data sources and assumptions used to develop these would be reported in the methodology report that will be talked about on form 4. So that's pretty straightforward. Any questions on that? Okay.

MR. PRETTO: Mike Pretto, Silicon Valley

Power. When we do our load forecasting, you talk about other drivers, frequently when we do it we'll have some of our large customers will provide us information that is very important in terms of what their plans are.

And those are the kinds of information we really -- we'll use the information in the forecast, but we don't want to disclose it, certainly not in any way. Because they're concerned for competitive reasons that whether or not their electrical planning plans somehow reach the public sector, the public.

MS. MARSHALL: Yeah.

MR. PRETTO: So, I would want you to be careful, and you know, if we give you the information be very careful on how you use it.

MS. MARSHALL: Right, and I think --

MR. PRETTO: Where to use it.

MS. MARSHALL: -- at some point here we need to talk about our confidentiality process. Okay, we'll come back and talk about that.

Anything else on form 2?

MR. ALVAREZ: Manuel Alvarez, Southern California Edison. I guess this is just a clarification on these particular forms. And if

information for these forms is submitted to other agencies or other organizations, will that satisfy you?

MS. MARSHALL: Oh, if you have equivalent data that's been submitted to FERC or something?

MR. ALVAREZ: Right.

MS. MARSHALL: Yeah, that's fine. If you have, you know, substantively the same data, and it's not in this precise layout, that's fine.

MR. ALVAREZ: Okay. And on some of the economic drivers, if we provide you just reference sources in terms of where the data comes from? Or do you actually want us to fill the forms out?

MS. MARSHALL: We may not have access. You know, some economic forecasts are proprietary. So we do need the key drivers; we do need you to document those.

MR. ALVAREZ: Okay, but anything that's publicly --

MS. MARSHALL: Provide the data.

MR. ALVAREZ: -- available we could just reference those sources to you or not?

MS. MARSHALL: Well, if you could just provide a copy. If It's a FERC form you could

just send us the FERC form, yes.

MR. ALVAREZ: Or state gross product figure?

MS. MARSHALL: Well, you know, if you're talking about a forecast people have different forecasts of GSP. So we need to know if that's the basis of how you answer why our forecasts are different is comparing the drivers that you use versus what we have.

MR. ALVAREZ: Okay. But I guess the general statement is that if it's available from other sources, other agencies, that will satisfy your requirements to the extent --

MS. MARSHALL: Yeah, you know, give us a copy of it. If it's not in this precise data layout, that's okay, as long as we get the equivalent data.

MR. ALVAREZ: Thank you.

MS. MARSHALL: Okay.

MR. BASS: Greg Bass with ARM. On form 2.3 the assumption is that part B is not required if you're not a gas supplier?

MS. MARSHALL: Well, if you don't use it, you know, at the Energy Commission in our models we use both electric and gas as part of our

forecast. If you don't use a gas, end-use gas demand forecasts, then you obviously don't have one to provide. So that's not required. If you use one, you can provide it.

MR. BASS: And then I think this question is somewhat along the same lines as has been asked previously. In form 1306, which is price per kilowatt hour by customer class that we provide to the CEC, is this form 2.3 not essentially the same information?

MS. MARSHALL: It might be if you're providing a forecast by those classes. But if some ESPs use different customer classes, then they need to provide the data, the price forecast they use for the classes, for their own classes. Might be the same; might be different.

MR. BASS: Okay. Form 2.4, and you'll forgive me here, I have kind of a string of questions here. On the customer count, so then it's not expected that the UDCs will be providing a customer account of what they expect?

MS. MARSHALL: Yeah, they are, because 2.3 and .4 are all LSEs. So the UDCs are submitting both 2.1 and .2 and 2.4.

MR. BASS: Right, but they will --

MS. MARSHALL: Because we didn't ask --

MR. BASS: -- specifically exclude then direct access customers from their customer accounts?

MS. MARSHALL: Well, we're asking them for both bundled and unbundled loads, so I think probably we need to make sure that we're asking -- that issue is clarified and they're reporting --

MR. BASS: Okay, so --

MS. MARSHALL: -- bundled and --

MR. BASS: Okay.

MS. MARSHALL: -- distinctly, so.

MR. BASS: What do you consider a customer? I guess -- I have about five questions here, but they all roll up to what is the definition of a customer.

MS. MARSHALL: I think there's obviously different definitions. What's probably more important is that you define what you're reporting. It might be number of meters. If it's number of meters and not, you know, aggregated to a site, we need to know that. So it's just important that you define what it is you're reporting.

MR. BASS: Okay. I believe the

utilities report to the CEC customer counts by only three categories, residential, small commercial and other. And this breaks it out into kind of, well, I think two other classes. What is it, one, two, three, four, five, yeah, two other classes.

And I was wondering do you want to change this form so it fits more with what the utilities are reporting our customer counts are to the PUC? Here's our concern, is that the utilities are reporting our customer counts to the PUC saying here are the three classes, residential, small commercial and other.

And then here we'll be reporting using our own definition of customer, breaking it into multiple --

MS. MARSHALL: Well, that's okay, because the purpose of this documentation is what is being assumed in your forecast.

MR. BASS: Okay.

MS. MARSHALL: So, you know, we already have access, we know what you're reporting to the utilities and what the utilities are reporting to us in some terms of number of accounts. But on a forecast basis what we want to know is what you

assumed. So it ought to be consistent with the way you're doing your forecast.

DR. JASKE: Well, as a clarification, I think the information that the IOUs provide the PUC (inaudible) as customers has segregation into about five or six different categories, not three.

MS. MARSHALL: Yeah.

DR. JASKE: Residential, certain kinds of --

MS. MARSHALL: Mike, you're not on --

DR. JASKE: -- industrial --

MR. KENNEDY: Microphone.

DR. JASKE: Certain kinds of commercial and industrial based on size. So I'm recalling the table, it's laid out this way. There must be five or six different columns at least.

MS. MARSHALL: Um-hum.

MR. BASS: Based on some previous answers you've given me, I think I can answer the last of the questions here. Thank you.

MS. MARSHALL: Okay.

MR. KENNEDY: Moving on to form 3.

MS. MARSHALL: Okay. Form 3 and form 5, which is the documentation for form 3. This covers all the various demand side programs.

We've broken these out. Basically we're asking for cost information and peak and energy impacts. And we've got first year energy efficiency impacts; the cumulative impacts over time.

Then 3.3 is any renewable or distributed generation impacts. And then finally, demand response programs. We are asking that, even though -- to include both dispatchable and nondispatchable, even though the nondispatchable, the dispatchable would not be included in the forecast. We'd like that all reported here.

So then we're asking for the methodology and the data sources for all of this to be documented on form 5. And to the extent that you have existing reports from consultants that you want to provide, that's fine.

And note, you would be submitting this twice. We proposed two due dates, so that the uncommitted data could be submitted later than the committed data that's reflected in the forecast.

MR. SCHULTZ: I'll try and ask as few questions as possible. Frank Schultz, Southern California Edison Company.

I have three primary questions. One, in the sales forecast it's indicated that they are

being requested to submit load impacts and 8760 load shapes.

MS. MARSHALL: Um-hum.

MR. SCHULTZ: Are you requesting 8760 load shapes for the energy efficiency impacts, as well?

MS. MARSHALL: Not separately, but we'd like them, the committed reflected in your 8760 forecast. So they would be accounted for on the committed. But, no, we have not asked for --

MR. SCHULTZ: The second question has to do with the categories. I understand there's some flexibility in the types of categories under which these program impacts can be submitted. How flexible is that?

MS. MARSHALL: Yes.

MR. SCHULTZ: And I'll tell you wy. For the long-term procurement plan Edison submitted its forecast energy efficiency impacts in market segments. We didn't do an end-use forecast.

MS. MARSHALL: Um-hum.

MR. SCHULTZ: So we have residential retrofit, commercial and industrial retrofit as our forecasting categories. We do not have specific program categories as indicated in your

outline.

MS. MARSHALL: I thought we were using the PUC-required categories in here.

MR. SCHULTZ: You're using the PUC funding categories.

MS. MARSHALL: Oh, okay. But you report them by sector? I think that's sufficient. Residential, commercial --

MR. SCHULTZ: The way those energy model functions it forecasts market segments. It does not --

MS. MARSHALL: Oh, okay.

MR. SCHULTZ: -- forecast specific programs.

MS. MARSHALL: Oh, okay. I think reporting it that way works.

MR. SCHULTZ: So market --

MS. MARSHALL: It's certainly -- yeah.

MR. SCHULTZ: Okay. Second item is a minor issue; once again, the forms don't seem to speak to low income energy efficiency programs, although they do have a resource impact.

MS. MARSHALL: Yeah.

MR. SCHULTZ: Is that to be included, as well?

MS. MARSHALL: Yeah, I think that's an oversight that we didn't explicitly mention that.

MR. SCHULTZ: Is there any problem with -- I hope there's no problem in submitting committed energy efficiency impacts in different categories as the forecasted energy efficiency impacts. Or do they need to be aligned?

MS. MARSHALL: I don't -- explain?

MR. SCHULTZ: The explanation is is that the categories that you currently are using, or have listed in the outline are for funding -- funded the way the --

MS. MARSHALL: Yeah, right.

MR. SCHULTZ: -- programs are currently funded. Do you want those -- so we can easily use those for the committed program impacts. But not for the forecast --

MS. MARSHALL: Oh, I see, you know, I think it's preferable to report them consistently by the --

MR. SCHULTZ: So you'd like the --

MS. MARSHALL: -- by the --

MR. SCHULTZ: -- one way or the other?

MS. MARSHALL: Yeah, have committed and uncommitted reported consistently. And I think

the market segments from this energy model are certainly -- we certainly can work with if those are the segments you're using.

MR. SCHULTZ: Okay, thank you.

MS. MARSHALL: Okay.

MS. JAFFE: Hi, Sarah Jaffe with NRDC. We had a few additional pieces of information that we thought would be helpful to collect here that might help the Commission when they're doing their report on the environmental impact of these programs.

We felt it was important to know the source of the funding for energy efficiency and renewable programs. So whether that's just coming from the state mandated public goods charge, or whether there's procurement dollars being placed in this program.

Secondly, we'd like to see a definition of renewables so that there's no confusion about what exactly is a renewable resource. And we think it would be helpful if utilities reported whether it was utility-scale renewable resources versus customer side of the meter.

We also felt that distributed generation should be split into probably two categories,

either renewable and nonrenewable DG, or split along the lines of ultraclean low emission, as defined by the state.

This is because some distributed generation is, in fact, very polluting, while other is very clean. So that would help you with your analysis of the environmental impact of DG.

And a similar argument also about demand response programs, whether or not they're using backup generation in those demand response programs. Because, of course, some backup generation is extremely polluting.

MS. MARSHALL: Okay. I might add, Kevin mentioned at the beginning is that we're also having an environmental data collection. So we'll have to look at what the precise --

MS. JAFFE: Yeah, we just --

MS. MARSHALL: -- forum for --

MS. JAFFE: -- weren't sure what you were going --

MS. MARSHALL: -- collecting on that data.

MS. JAFFE: -- to be asking for. And we felt since you were already asking this information on these forms, that perhaps it would

be easy to just include that with that.

MS. MARSHALL: Although, you know, in defining renewables we would only -- and our distributed gen is only customer side of the meter. So if you wanted to get a comprehensive view, there might be a better -- to ask for that data elsewhere. But we'll certainly look into that.

MS. JAFFE: Thank you.

MR. SCHULTZ: Sorry, Frank Schultz, Edison. Just one quick question. It's my understanding that one of the primary purposes of this is to -- I don't know if it's a primary purpose or not -- but what the utilities are expected to do is take the forecast that they developed for the long-term procurement plans, and realign them with the CEC's forecasting requirements.

Is that a correct statement? Or are we being asked to develop new forecasts for this process?

MS. MARSHALL: No. This would be your new forecast next year, you know, you're going into next January. The last procurement proceeding is over. Now you're developing a new

forecast and bringing that to the table for comparison to staff's forecast. And then we have a process to decide, do they agree, do we have issues.

And then that feeds into the next procurement proceeding. So we are not asking for results from the last procurement.

MR. SCHULTZ: So this is not a follow on and a repackaging of the forecast we've already developed? This is a new set of forecasts that will be the precursor to the next long-term procurement plan?

MS. MARSHALL: Right.

MR. SCHULTZ: That's a different level of effort.

(Laughter.)

MR. SCHULTZ: Okay.

DR. JASKE: That's a very important distinction --

MR. SCHULTZ: Yes.

DR. JASKE: -- which I think the ruling that President Peevey put out attempts to describe what's going on between the proceedings of the three entities, the Energy Commission, the PUC and the ISO, with sort of the 2005 IEPR being the

launch to this new cycle.

So conformance, load forecasts are submitted into the 2005 IEPR should not be viewed as being in conformance with 2004 procurement.

MR. SCHULTZ: Thank you very much; that was a very valuable question on my part.

MS. MARSHALL: Okay.

DR. JASKE: I actually have a question about form 3.4, which is demand response. The form, itself, has energy as one of the attributes of the programs. And obviously some --

MS. MARSHALL: That's probably --

DR. JASKE: -- some demand response might actually save energy and some shift energy. What kind of guidance would you give about how to report energy for demand response programs?

MS. MARSHALL: Good question. I don't know to what extent; I think it will only be specific programs that might have really significant energy effects. In particular, if you have nondispatchable programs, dynamic pricing might have more --

MR. SCHULTZ: I'm not ready to address the individual dispatchable programs at this particular point in time. There's a lot of

studies that are currently in process (inaudible).

DR. JASKE: Well, I think we'll have to clarify what it is we're looking for --

MS. MARSHALL: Right.

DR. JASKE: -- in the final version.

MS. MARSHALL: Okay.

MR. BASS: Greg Bass with ARM.

MS. MARSHALL: Oh, okay.

MR. BASS: Last, but not least. I'm going to show my ignorance here. On all the forms, form 3.1 through 3.4, there is a column entitled megawatt/gigawatt hour mmBtu and then 2003 dollars.

MS. MARSHALL: Yeah.

MR. BASS: Under the row, I guess it would be megawatt, is that to be the megawatt savings forecasted?

MS. MARSHALL: Right, that would be your peak savings impact.

MR. BASS: Okay. Peak savings.

MS. MARSHALL: Yeah, your coincident peak.

MR. BASS: And then gigawatt hour would then be obviously the energy associated with that --

MS. MARSHALL: Annual energy.

MR. BASS: -- with that peak? Okay. And then 2003 dollars. Is that the savings that's estimated?

MS. MARSHALL: No, that's the program cost.

MR. BASS: Okay. So then -- okay. So then for my constituency, then, these would necessarily, of course, then get rolled up into our forecasts, these savings. The megawatt and the megawatt hour savings.

MS. MARSHALL: To the extent they're committed. These should be the programs that you accounted for in some fashion in your forecast.

MR. BASS: Okay.

MS. MARSHALL: Uncommitted would not be.

MR. BASS: Okay. And then how would my group define a program cost? Is it even relevant?

MS. MARSHALL: It may not be.

MR. BASS: Okay.

MS. MARSHALL: Yeah, so, okay.

MR. BASS: Because it wouldn't be associated with any state funds or ratepayer funds.

MS. MARSHALL: I don't know, would -- well, you know, if you're not -- if your members aren't running programs I don't know that they have costs. I think this gets into the disaggregation of the utility area.

MR. BASS: We don't necessarily run programs, but we do have demand side projects that are --

MS. MARSHALL: Okay.

MR. BASS: -- that are fully funded in some way, either through the --

MS. MARSHALL: Okay, so what I think --

MR. BASS: -- entire project or --

MS. MARSHALL: -- so what you're reporting is planned demand side projects that you've accounted for in your forecasts, so you wouldn't necessarily have a cost?

MR. BASS: Right, yeah. I mean there is a cost involved, but it isn't a cost that's being borne by anybody other than the customer and ourselves, so.

MS. MARSHALL: Okay, we should clarify that a little.

MR. BASS: Thank you very much.

MS. MARSHALL: Okay.

DR. VONDER: Tim Vonder, again. Quick question on DSM committed.

MS. MARSHALL: Um-hum.

DR. VONDER: I guess a couple things. Are we to include existing committed DSM? And in both the existing and future committed DSM, are we to consider decay in the DSM?

MS. MARSHALL: Yes.

DR. VONDER: And is there any assumption regarding replacement if there is decay? Or just decay and leave it at that?

MS. MARSHALL: I think this form is just the decay savings from those program impacts. Is that --

DR. VONDER: Okay, so first year, and it has a life, and then it decays.

MS. MARSHALL: Yeah.

DR. VONDER: So the impacts lessen as the decay occurs?

MS. MARSHALL: Yeah.

DR. VONDER: And then for programs that are in place prior to 2006 the impacts that we're carrying forward and they decay, we allow that decay to occur, also?

MS. MARSHALL: Um-hum.

DR. VONDER: Okay. Just wanted to make sure.

DR. JASKE: Well, I think just to clarify the intent of your question, what would you then do about the decayed impacts? Would you replace them with something that's sort of customer initiated?

DR. VONDER: Well, there's a couple ways to go about that. One would be to assume that it gets picked up in noncommitted. But we're not going to be including noncommitted in this version of the forecast.

And then there's assumption that it could be -- that consumers would replace technologies that wear out with technologies that were at least as energy efficient, so.

DR. JASKE: Well, it seems to me that these are, in fact, illustrations of uncertainties, and there is no right answer. So you should, at least from my perspective, just document whatever you assume so that we understand, you know, what you have done.

I don't think we're intending in this area to impose a particular kind of uniformity. However you want to decide to produce your

forecast, do so and document it.

MS. MARSHALL: Okay. Speaking of documentation, form 4 is your report on the method you used, how you define your customer classes, your forecast categories, explanation of things like loss, what losses are included in your forecast. It's a part of load we talked about a little bit, what you assumed about operating practices and price response in developing that forecast.

The weather adjustment; methods used to develop the weather sensitivity case we're particularly interested in. Supply -- calibration, and we have already distributed to most people, I think, the consumption data that we're using, or sales data we're using for our LSE forecast. So we hope you'll review those and provide comment and let us know if we do, indeed, have a consistent set of data between us.

To the extent that you have pre-existing reports on your forecast methodology, those are fine.

Does anyone have any questions on that?

Form 6. This is the uncertainty area. In the instructions we list a number of issues

that we think are of interest; regulatory changes, effects of demand response, prices, economic and other market conditions. We are asking that each LSE characterize those uncertainties. It may be those, it may be some we didn't list, that you think are most significant for your forecast. And to quantify the expected effects.

We are not asking each LSE to quantify each of those cases. It's actually a little ambiguous as you read the text. So we'll clarify that in the next one, that we are not requiring everyone to list every possible -- to quantify every possible case we listed.

And with that, I think people -- we can go back to more general comments and questions. And there were several questions we asked about uncertainty about how we ought to pursue that.

MR. COCKAGNE: Mike Cockagne from LADWP. Actually I think uncertainty is the role of the state and not LSE. One reason I believe that is that I think the number one uncertainty in this state right now is demographics.

And of the forecasts that I've seen for the next ten years in terms of population, probably a wider variance than I've seen in my

career. Department of Finance has just lowered their forecast for the state around 39 million. I think in your last process it was closer to 40 million. Just went to the UCLA forecast; they more agree with the 40 million.

So there's a huge difference in demographics of the state. And to me that's the biggest uncertainty.

Another issue about uncertainty is that if you aggregate all the LSE forecasts together I believe that you'll be too high. Because an LSE has to plan for its service area load. But I think what we know about demographics in the state, is that really the big issue in demographics is migration. And what causes migration is economic ruin.

So I think if you look at most demographic forecasts you see a migration pattern about 190,000 people a year coming into the state. If you look over the last ten years, the standard deviation on migration pattern is about 170,000. So your mean and your variance are very high.

What causes those variances is economic ruin and in 1993/94 we had aerospace defense collapse in L.A. County. Of the 170,000 that

moved out of the state that year, I think 110,000 came from L.A. County. And yet if you were forecasting in 1990 you never would have forecasted the events that came together to cause that aerospace, you know, the end of the Cold War, the federal government basically shutting down.

I can think of two other cases in the state where you've lost industries in the last 10 or 15 years. I think in Sacramento area you had the closing down of three Air Force bases. And I think in the Silicon Valley recently you had the bubble burst.

But I think the point is that we know, I think, in the next ten years we're going to have some industry in California disappear. As a local forecaster, I cannot put that in my service area. I'd be irresponsible to do that. I don't believe any of these other guys can do it.

But at the state level, I mean that would be the kind of input into the forecast that I think you could really add. And therefore, I really don't know, if you add up all the LSE forecasts and your state forecasts, they should equal, if that's even the right answer.

So, I think demographics is the big

uncertainty here. And it's really migration patterns and how you forecast that, I think it's very difficult.

MR. KENNEDY: Any other comments or questions on form 6, on the uncertainty issue, or more broadly?

MR. ASLIN: Richard Aslin, Pacific Gas and Electric Company. This isn't on form 6, it's more general.

I just wanted to get final clarification on this issue about, for example, Pacific Gas and Electric Company, our forecasts are in the FERC regulatory accounts; that's how we do our forecasts.

MS. MARSHALL: Yeah.

MR. ASLIN: And in the forms it talks about different levels, like an SIC-based or NAICS-based. And what I understood earlier was that it will be okay for us to file our forecast in terms of the FERC form?

MS. MARSHALL: Yeah.

MR. ASLIN: Okay.

MS. MARSHALL: Yeah, we've worked with that.

MR. ASLIN: All right. Thanks.

MR. KENNEDY: It may be useful at this point to sort of return to the attachment A in terms of the substantive load forecasting issues that were part B, and just sort of lay those on the table for the group and see whether there's any particular thoughts, comments, suggestions that folks have.

I'll just quickly go over the three questions that were in part B on this:

What are the key uncertainties affecting the actual amount of electricity that end-users will consume in California through a ten-year time horizon?

What are the key uncertainties that affect the amount of retail load that LSEs, of various types and legal/regulatory constructs, should expect to serve through a ten-year timeframe?

What is the best way to address the quantitative significance of these physical and legal/regulatory uncertainties?

And these are some of the issues that we, of staff, are sort of wrestling with and putting, trying to move forward on. And certainly we have a lot of collected knowledge about load

forecasting around the state in this room.

So to the extent that folks have thoughts or comments on those, it may be useful to share with the group.

On the other hand, --

(Laughter.)

MR. KENNEDY: Perhaps as I had said before, as you put together any written comments, while we haven't really marched through the questions in part A of this, it may be useful to go back to the attachment A and keep that in mind as you prepare any written comments, to the extent you have comments or suggestions.

We have had a couple of passing references to confidentiality issues. And I'm going to ask Caryn Holmes, the staff attorney dealing with data collection portions of this, to say a little bit about that.

MS. HOLMES: Good morning. Most of you are, if you've been involved in the Energy Commission's proceedings before, are familiar with sort of the general construct of the confidentiality process that we use.

The Commission starts with an assumption that the data we use is public. This is reflected

in state law. Nevertheless, we understand that some of the data that we receive as part of our data collection process is entitled to confidential designation, and will be treated as such by the Commission Staff and by the Commission in their work and in issuing reports.

Typically confidential data that's coming across into our offices these days falls into one of three categories -- I'm not sure they're all going to be relevant to the demand forecast issue -- has to do with, the first category would be proprietary data.

Data that entities have collected that represents something that gives them a competitive advantage, and that they have taken efforts to keep confidential, themselves.

A second category of information is -- and again, I'm not sure this is going to come up in this context -- specific customer data. Customers have a right to privacy; they have a right to not have individual data released. That's something else that we also take into account when we go through our confidentiality process.

The third category of data is one we're

paying more attention to these days. It has to do with security concerns, information that comes to us that has security implications may be kept confidential.

The Commission's regulations set out a fairly detailed process for confidential designations. There are several categories of data that are automatically confidential. I wish I had a copy of our regulations with me this morning, but they're across the street in the building and I'm not going to try to make sure that I can remember them all off the top of my head.

For those types of data the entity needs to simply identify the data as such; and I believe sign an attestation that it hasn't been publicly released anywhere. And that type of data is automatically deemed confidential.

For other types of data we ask for an application for confidentiality, which is just really a statement, an explanation of why it's proprietary, why it constitutes a trade secret, whatever the basis is, and give us a little information about the data. Goes through a review process that's relatively quick, and you get an

answer back.

Typically the way the process works is give-and-take between the attorneys for the people that are submitting the information, and Energy Commission Attorneys who handle confidentiality. There is one person who handles all of our confidentiality issues so that there is consistency across information types. He was planning to be here this morning, but I guess he maybe went across the street and didn't realize that the workshop had been moved.

Finally, there was a question or a comment earlier about aggregation. In addition to specific categories of data being deemed automatically confidential, the Commission's regulations on confidentiality identify certain levels of aggregation which we deem sufficient to protect confidentiality.

Now, if there is a specific reason, there's a factual circumstance that you believe that that rule is not protected, then you need to tell us about it so we can take a second look at it. And we'll be doing that as we go through this process and you're submitting data.

So if anybody has any general questions

about confidentiality I'd be happy to try to answer them. The specific kinds of questions that I think that most of you will be concerned with in terms of what is or what isn't, that will get handled as you submit things and work with the attorney in the legal office who handles all the requests for confidentiality.

MR. MUREAU: Ted Mureau, Southern California Edison. My particular concern is the request for hourly data, particularly for the UDC load. That information clearly has economic ramifications for the utility and its ratepayers.

I would suggest that the staff, in their forms and instructions, be proactive in identifying what beforehand is confidential. Because I think it makes it easier to complete the forms and instructions if we know ahead of time what will be treated as confidential.

This issue has been resolved at the PUC. We provide them with confidential hourly data, and it's used in various proceedings. And we would assume that the Energy Commission would adopt similar rules and regulations in terms of hourly data, as opposed to this back-and-forth between legal staffs.

MR. ALVAREZ: I'm Manuel Alvarez, Southern California. Ted brought up a good point, and I guess it's an item I wanted to bring up generically that Karen brought up in terms of the history of the confidentiality information.

I have the regulations back in my office, also, so I'm familiar with it. But there's a category subsequently, you know, in terms of market-sensitive information where an additional party can use some information for strategic advantage that is detrimental to other folks that is not in the historical category that needs to be considered.

And then you get into this generic problem of relationship between the Energy Commission's confidentiality rules and the PUC's confidentiality rules and the presumption of what's public and what's not. And that's an area we've talked about for a number of years.

I guess I'll put my faith hat on and say that at some point, maybe, you know, our faith-based policies will get us to some resolution and resolve there. It's definitely something that needs to be considered.

PRESIDING MEMBER GEESMAN: Yeah, if I

can break in there, I would not rely on a faith-based policy. I think that you're much better off looking at the statute that governs the Energy Commission. It's a different statute from that which governs the Public Utilities Commission.

And I think you need to recognize, as I believe the Energy Commission has historically done, we will carry out our statute. And I don't believe that's likely to allow for advanced guidance on what will be characterized as confidential or not.

I'm sorry that that creates an inconvenience, but I think the best guidance here would be to look to our statute and our regs.

MR. KENNEDY: Are there any other questions or comments on the question of confidentiality?

Well, I think we are actually getting very close to the end. Commissioner Geesman, I don't know if you want to make some general comments? I guess no.

So, if anyone has any final comments that they want to share about any of the topics discussed today this would be an opportunity.

I do have some information on tomorrow.

It's a bit uncertain at this point. We will either be back here or in Hearing Room A across the street, depending on whether or not the Energy Commission building is open tomorrow.

Unfortunately, we apparently won't have any word on that until at least about 2:30 this afternoon.

So, if you're planning to come tomorrow, plan to show up, and once again, if the Energy Commission building's not open, then I would assume that we will be in this same room. We apparently do have the ability to use this room again tomorrow.

And just a reminder that in terms of any written comments we have asked for them to be submitted by September 30th.

We will also try to get something of a summary of the meeting out to the folks who participated and posted to the website.

And also, as soon as we can, we will have the transcript of this meeting up on the website.

So, unless there are any further comments? I think we are done for today.

Thank you all for your patience as we

sort of shuffled around and got things started.

(Whereupon, at 12:45 p.m., the workshop was adjourned.)

--o0o--

CERTIFICATE OF REPORTER

I, PETER PETTY, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Committee Workshop; that it was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said workshop, nor in any way interested in outcome of said workshop.

IN WITNESS WHEREOF, I have hereunto set my hand this 29th day of September, 2004.